

§ 101.23

breakable plastic; that contain no substantial metal parts, and that weigh not more than 1,500 grams, including the propellant, need not comply with § 101.23 (b), (c), (g), and (h), provided:

(a) That person complies with all provisions of § 101.25; and

(b) The operation is not conducted within 5 miles of an airport runway or other landing area unless the information required in § 101.25 is also provided to the manager of that airport.

[Amdt. 101-6, 59 FR 50393, Oct. 3, 1994]

EFFECTIVE DATE NOTE: At 73 FR 73781, Dec. 4, 2008, § 101.22 was revised, effective Feb. 2, 2009. For the convenience of the user, the revised text is set forth as follows:

§ 101.22 Definitions.

The following definitions apply to this subpart:

(a) *Class 1—Model Rocket* means an amateur rocket that:

(1) Uses no more than 125 grams (4.4 ounces) of propellant;

(2) Uses a slow-burning propellant;

(3) Is made of paper, wood, or breakable plastic;

(4) Contains no substantial metal parts; and

(5) Weighs no more than 1,500 grams (53 ounces), including the propellant.

(b) *Class 2—High-Power Rocket* means an amateur rocket other than a model rocket that is propelled by a motor or motors having a combined total impulse of 40,960 Newton-seconds (9,208 pound-seconds) or less.

(c) *Class 3—Advanced High-Power Rocket* means an amateur rocket other than a model rocket or high-power rocket.

§ 101.23 Operating limitations.

No person may operate an unmanned rocket—

(a) In a manner that creates a collision hazard with other aircraft;

(b) In controlled airspace;

(c) Within five miles of the boundary of any airport;

(d) At any altitude where clouds or obscuring phenomena of more than five-tenths coverage prevails;

(e) At any altitude where the horizontal visibility is less than five miles;

(f) Into any cloud;

(g) Within 1,500 feet of any person or property that is not associated with the operations; or

(h) Between sunset and sunrise.

(Sec. 6(c), Department of Transportation Act (49 U.S.C. 1655(c)))

[Doc. No. 1580, 28 FR 6722, June 29, 1963, as amended by Amdt. 101-4, 39 FR 22252, June 21, 1974]

EFFECTIVE DATE NOTE: At 73 FR 73781, Dec. 4, 2008, § 101.23 was revised, effective Feb. 2, 2009. For the convenience of the user, the revised text is set forth as follows:

§ 101.23 General operating limitations.

(a) You must operate an amateur rocket in such a manner that it:

(1) Is launched on a suborbital trajectory;

(2) When launched, must not cross into the territory of a foreign country unless an agreement is in place between the United States and the country of concern;

(3) Is unmanned; and

(4) Does not create a hazard to persons, property, or other aircraft.

(b) The FAA may specify additional operating limitations necessary to ensure that air traffic is not adversely affected, and public safety is not jeopardized.

§ 101.25 Notice requirements.

No person may operate an unmanned rocket unless that person gives the following information to the FAA ATC facility nearest to the place of intended operation no less than 24 hours prior to and no more than 48 hours prior to beginning the operation:

(a) The names and addresses of the operators; except when there are multiple participants at a single event, the name and address of the person so designated as the event launch coordinator, whose duties include coordination of the required launch data estimates and coordinating the launch event;

(b) The estimated number of rockets to be operated;

(c) The estimated size and the estimated weight of each rocket; and

(d) The estimated highest altitude or flight level to which each rocket will be operated.

(e) The location of the operation.

(f) The date, time, and duration of the operation.

(g) Any other pertinent information requested by the ATC facility.

[Doc. No. 1580, 28 FR 6722, June 29, 1963, as amended by Amdt. 101-6, 59 FR 50393, Oct. 3, 1994]

Federal Aviation Administration, DOT

§ 101.29

EFFECTIVE DATE NOTE: At 73 FR 73781, Dec. 4, 2008, §101.25 was redesignated as §101.27 and revised, effective Feb. 2, 2009. For the convenience of the user, the revised text is set forth as follows:

§ 101.27 ATC notification for all launches.

No person may operate an unmanned rocket other than a Class 1—Model Rocket unless that person gives the following information to the FAA ATC facility nearest to the place of intended operation no less than 24 hours before and no more than three days before beginning the operation:

- (a) The name and address of the operator; except when there are multiple participants at a single event, the name and address of the person so designated as the event launch coordinator, whose duties include coordination of the required launch data estimates and coordinating the launch event;
- (b) Date and time the activity will begin;
- (c) Radius of the affected area on the ground in statute miles;
- (d) Location of the center of the affected area in latitude and longitude coordinates;
- (e) Highest affected altitude;
- (f) Duration of the activity;
- (g) Any other pertinent information requested by the ATC facility.

EFFECTIVE DATE NOTE: At 73 FR 73781, Dec. 4, 2008, a new §101.25 was added, effective Feb. 2, 2009. For the convenience of the user, the added text is set forth as follows:

§ 101.25 Operating limitations for Class 2—High-Power Rockets.

- (a) You must comply with the General Operating Limitations of §101.23.
- (b) In addition, you must not operate a Class 2—High-Power Rocket—
 - (1) At any altitude where clouds or obscuring phenomena of more than five-tenths coverage prevails;
 - (2) At any altitude where the horizontal visibility is less than five miles;
 - (3) Into any cloud;
 - (4) Between sunset and sunrise without prior authorization from the FAA;
 - (5) Within 8 kilometers (5 statute miles) of any airport boundary without prior authorization from the FAA;
 - (6) In controlled airspace without prior authorization from the FAA;
 - (7) Unless you observe the greater of the following separation distances from any person or property that is not associated with the operations applies:
 - (i) Not less than one-quarter the maximum expected altitude;
 - (ii) 457 meters (1,500 ft.);
 - (8) Unless a person at least eighteen years old is present, is charged with ensuring the safety of the operation, and has final approval authority for initiating high-power rocket flight; and

- (9) Unless reasonable precautions are provided to report and control a fire caused by rocket activities.

§ 101.26 Operating limitations for Class 3—Advanced High-Power Rockets.

You must comply with:

- (a) The General Operating Limitations of §101.23;
- (b) The operating limitations contained in §101.25;
- (c) Any other operating limitations for Class 3—Advanced High-Power Rockets prescribed by the FAA that are necessary to ensure that air traffic is not adversely affected, and public safety is not jeopardized.

[Doc. No. FAA-2007-27390, 73 FR 73781, Dec. 4, 2008]

EFFECTIVE DATE NOTE: By Amdt. 101-8, 73 FR 73781, Dec. 4, 2008, §101.26 was added, effective Feb. 2, 2009.

Subpart D—Unmanned Free Balloons

SOURCE: Docket No. 1457, 29 FR 47, Jan. 3, 1964, unless otherwise noted.

§ 101.29 Information requirements.

(a) *Class 2—High-Power Rockets.* When a Class 2—High-Power Rocket requires a certificate of waiver or authorization, the person planning the operation must provide the information below on each type of rocket to the FAA at least 45 days before the proposed operation. The FAA may request additional information if necessary to ensure the proposed operations can be safely conducted. The information shall include for each type of Class 2 rocket expected to be flown:

- (1) Estimated number of rockets,
 - (2) Type of propulsion (liquid or solid), fuel(s) and oxidizer(s),
 - (3) Description of the launcher(s) planned to be used, including any airborne platform(s),
 - (4) Description of recovery system,
 - (5) Highest altitude, above ground level, expected to be reached,
 - (6) Launch site latitude, longitude, and elevation, and
 - (7) Any additional safety procedures that will be followed.
- (b) *Class 3—Advanced High-Power Rockets.* When a Class 3—Advanced